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RE:

U.S. Patent Application Serial No. 10/685,981;

Entitled: "CANTILEVERED MULTI PURPOSE TOWER":

Inventors: Joop Roodenburg and Pieter Dirk Melis van Duivendijk.

Sirs:

Enclosed for filing in the above-mentioned application is:

- (1) An Information Disclosure Statement;
- (2) A Form PTO-1449 listing references A1-A12, B1-B4;
- (3) Copies of references B1-B4; and
- (4) A postcard. Please date stamp and return the enclosed postcard to evidence receipt of these materials.

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Information Disclosure Statement Serial Application No. 10/685,981 March 23, 2004 Page 2 of 2

No fees are believed to be due in connection with these materials. However, the Commissioner is hereby authorized to charge any deficiencies to Deposit Account No 50-1313 in the name of Buskop Law Group. A duplicate copy of this transmittal is enclosed.

Respectfully submitted,

Wendy K. B. Buskop

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Joop Roodenburg and

Pieter Dirk Melis van Duivendijk

Group Art Unit: 3673

Serial No.: 10/685,981

Examiner: Not Assigned

Filed: October 15, 2003

For: Cantilevered Multi Purpose Tower

Atty Dkt No.: 1141.11A

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INFORMATION DISCLOSURE STATEMENT

Sir:

- I. Applicants hereby submit an Information Disclosure Statement and enclose a Form PTO-1449 listing references A1-A12 and B1-B4 for consideration by the Examiner. Copies of each listed reference are not enclosed. However enclosed are references B1-B4.
- II. Applicants hereby request the Examiner to consider each cited reference. As required under 37 C.F.R. § 1.98(a)(3)(i), the following are concise explanations of the relevance of each reference, as they are presently understood:

REFERENCE A1:

"A drilling rig equipped with two sets of hoisting mechanisms. The two crown blocks are shiftable to enable either block to be positioned over the drill hole. The drown blocks carry depending guides for the two traveling blocks. The guides move horizontally and vertically as the crown blocks are shifted, but are constrained to remain vertical."

REFERENCE A2:

"Compensating apparatus connected between a traveling block of a well bore rig mounted on a vessel float in a body of water and a hook from which a running string is supportable, the compensating apparatus including a pair of elongate cylinders, straddling and connected to the traveling block and a pair of companion piston rods connected to and straddling the hook and secured to pistons relatively longitudinally shiftable in the cylinders, liquid under pressure being maintained in the cylinders under the pistons to support a substantial portion of the weight of the running string suspended from the hook. The compensating apparatus can be rendered inoperative when desired. Shock absorbers retard sudden upward movement and retraction of the compensating apparatus in the event of sudden release or diminution of the load on the apparatus, as might result from failure of the running string."

REFERENCE A3:

"A motion compensated crown block system in which a crown block sheave means is movable along a vertical path defined by a framework usually forming part of a drilling rig which is supported on a vessel. The crown block sheave assembly, which carries the hook load, is principally supported by inclined fluid pressure cylinder and piston means having one of their ends pivotally connected to the sheave means and their other ends pivotally connected to the framework in lateral spaced relation to the generally vertical pathway of the sheave means. Changing inclination of the cylinder and piston means during relative movement of the crown block sheave assembly and vessel provides variation in the piston reaction vertical force component which is caused to be nearly proportional to the change in fluid pressure in the cylinder and piston means. Load variation of less than 5 percent of the hook load is achievable over the full path of travel of the sheave means and is in the order of 2 percent over a major portion of said path in which the crown block sheave assembly travels. Means for sensing motion of the crown block sheave means relative to the sea bed are also provided so that the crown block sheave means will be virtually stabilized to maintain unchanged relation with respect to the sea bed during heaving of the vessel as caused by wind and wave action. Means are also provided for reducing to a minimum travel of the sheave cables over idle sheaves during travel of the crown block sheave means in its vertical path."

REFERENCE A4:

"For use with a standard drilling rig on a floating barge, there is interposed between the traveling block frame and the drill string support a drill string compensator having a cylinder and piston expansible chamber (with or without a motion multiplier) furnished with air under pressure within a normally closed volume. The air chamber acts as a cushion and is arranged so that the variation in chamber volume produces only a small change in the air pressure, which can be set at any desired average value. Motion of the pneumatic, expansible chamber is controlled by a hydraulic expansible chamber. Various emergency and manual controls are provided."

REFERENCE A5:

"A well drilling control system in which the hoist mechanism which supports the drill strong and which is also employed to move well bore and well head equipment between a floating barge and the well bore and bottom of the sea, is controlled by load sensing and movement sensing signaling transmitters to maintain a predetermined weight on the drill bit during drilling operations and to facilitate properly positioning, raising and lowering of well bore and well head equipment, notwithstanding movement of the floating barge vertically by wave action. A reverse drive mechanism drives the hoist mechanism in a direction to allow downward movement of the drill string, well bore or well head equipment when the acceleration of the barge is so rapid that the supported weight does not overcome the inertia of the drawworks."

REFERENCE A6:

"A gimbal-mounted heave-compensated stable platform for a surface vessel from which deep ocean mining equipment is lowered, operated, and raised. The platform, which provides a stable base for a derrick and heavy lift apparatus, is supported with minimal friction, by a pair of spaced vertical guide frames mounted on the vessel. A gimbal support member is vertically movable in each of the guide frames. The heave control system controls the position and movement of the support members relative to the guide frames. A gimbal frame is rotatably supported on the gimbal support members by anti-friction bearings for rotation about a first axis. The stable platform is in turn rotatably supported on the gimbal frame by anti-friction bearings about a second axis of rotation perpendicular to the first axis. Variable length snubbing members mounted on the gimbal frame engage the platform at extreme angles of rotation of the platform about the second axis. Additional variable length snubber members mounted in fixed relation to the vessel engage the platform when the platform rotates to extreme angles in either direction about the first axis."

REFERENCE A7:

"A floating platform has a polygonal, submerged floating body constructed from concentric pipe sections whereby the space between each two concentric pipes is compartmentized and serves as storage facility as well as ballast tanks. Columns also constructed as upright concentric pipes extend from the submerged float and carry platform defining and establishing frame which carries e.g. a drilling derrick. The interior spaces of all inner pipes serve as transport path, a closed one being provided in the main float and elevator(s) as well as pump-up paths for liquid loads are provided in the columns."

REFERENCE A8:

"This invention relates to drilling rigs, and more particularly to novel apparatus for supporting a plurality of pairs of block and tackle systems with the tackle systems of each pair operable sequentially and alternately, the one being used to support a main drilling or tubing string while the other is being used to rack stands of tubing therefrom."

REFERENCE A9:

"Disclosed is a compensator applicable for use with a traveling block supported from a mast, derrick or the like by means of a crown block wherein the traveling block may be utilized for supporting objects. Two fluid pressure piston-and-cylinder assemblies are arrayed on opposite sides of a line of travel of the traveling block relative to the crown block so that a flexible line positioned about the sheaves of both blocks passes over a pulley supported by one fluid pressure assembly. One end of the flexible line may be anchored relative to the mast as a deadline while the line at its other end may be selectively retracted or payed out by a drawworks or the like fixed relative to the mast. The crown block is supported by flexible lines passing over pulleys also supported by the fluid pressure assemblies. With the drawworks holding the first flexible line fixed, the crown block and the traveling block may move in unison relative to the mast with proportional reciprocable movement on behalf of each of the fluid pressure assemblies while the traveling block remains stationary relative to the crown block. Operation of the drawworks to retract or pay out the line results in manipulation of the traveling block relative to the crown block regardless of movement of the two blocks relative to the mast."

REFERENCE A10: "Disclosed is a compensator applicable for use with a traveling block supported from a mast, derrick or the like by means of a crown block wherein the traveling block may be utilized for supporting objects. Two fluid pressure piston-and-cylinder assemblies are arrayed on opposite sides of a line of travel of the traveling block relative to the crown block so that a flexible line positioned about the sheaves of both blocks passes over a pulley supported by one fluid pressure assembly to one side of the line of travel and, on the other side, the flexible line passes over a pulley supported by the other fluid pressure assembly. One end of the flexible line may be anchored relative to the mast as a deadline while the line at its other end may be selectively retracted or payed out by a drawworks or the like fixed relative to the mast. In one embodiment, the pulleys are carried by a carriage which is carried by the fluid pressure assemblies. The crown block is supported by flexible lines passing over pulleys also supported by the fluid pressure assemblies. In another embodiment, the fluid pressure assemblies directly support the crown block, and pulley assemblies are supported by flexible lines between the crown block and the mast, and include pulleys over which the flexible line connecting the two blocks passes. With the drawworks holding the first flexible line fixed, the crown block and the traveling block may move in unison relative to the mast with

proportional reciprocable movement on behalf of each of the fluid pressure assemblies while the traveling block remains stationary relative to the crown block. Operation of the drawworks to retract or pay out the line results in manipulation of the traveling block relative to the crown block regardless of movement of the two blocks relative to the mast."

REFERENCE A11: "A method and apparatus for increasing the load handling capacity of a system, having at least one fluid driven compensating means, incorporates a booster fluid actuated piston cylinder assembly interconnecting portions of the compensating system so as to substantially affect the force reacting characteristics thereof, whereby greater loads will produce lesser movement of the compensating means."

REFERENCE A12: "A method and apparatus for increasing the load handling capacity of a system, having at least one fluid driven compensating means, incorporates a booster fluid actuated piston cylinder assembly interconnecting portions of the compensating system so as to substantially affect the force reacting characteristics thereof, whereby greater loads will produce lesser movement of the compensating means."

REFERENCE B1:

REFERENCE B2:

"A compensator applicable for use with a traveling block (24) supported from a mast (12), derrick or the like by means of a crown block (26) includes fluid pressure means, eg piston-and-cylinder assemblies on opposite sides of a line of travel of the traveling block relative to the crown block so that a flexible line positioned above the sheaves of both blocks passes over a pulley supported by one fluid pressure assembly to one side of the line of travel and, on the other side, the flexible line passes over a pulley supported by the other fluid pressure assembly. One end of the flexible line may be anchored relative to the mast as a deadline while the line at its other end may be selectively retracted or payed out by a drawworks or the like fixed relative to the mast. In one embodiment, the pulleys are carried by carriage which is carried by the fluid pressure assemblies. The crown block is supported by flexible lines passing over pulleys also supported by the fluid pressure assemblies. In another embodiment, the fluid pressure assemblies directly support the crown block, and pulley assemblies are supported by flexible lines between the crown block and the mast, and include pulleys over which the flexible line connecting the two blocks passes. With the drawworks holding the first flexible line fixed, the crown block and the traveling block may move in

unison relative to the mast with proportional reciprocal movement on behalf of each of the fluid pressure assemblies while the traveling block remains stationary relative to the crown block. Operation of the drawworks to retract or pay out the line results in manipulation of the traveling block relative to the crown block regardless of movement of the two blocks relative to the mast.

REFERENCE B3:

"An apparatus for handling palletized cargo for ships, comprising a first lift means (1A) disposed on the exterior (13) of a ship and a second lift means (18) disposed in the same cross-sectional plane on the interior (14) of the ship, and a horizontal cargo transfer and transportation assembly (1C) arranged between said first and second lifts (1A, 1B). The transfer assembly (1C) consists of forks (9) fastened to a frame (7), and the ends (18) of the frame are slidably mounted on rails (8). The movement of the frame (7) in the direction of transfer (D) is controlled by means of hydraulic cylinders (11). Each rail (8) is attached to parallel guide arms (5, 5'), the ends of the arms being rotatably attached respectively, to fastening brackets (4) disposed on the deck (12) of the ship and to the rail (8). The direction of movement (D') for the guide arms (5, 5') and thereby for the frame (7) toward the lifts is controlled by hydraulic cylinders (10). The first lift means (1A) is disposed in a recess provided in the side of the ship."

REFERENCE B4: ABSTRACT NOT AVAILABLE IN ENGLISH

III. No fees are believed to be due in connection with these materials. This Information Disclosure Statement is being filed prior to receipt of an official Office Action.

Respectfully submitted,

Date: March 23, 2004

Wendy K. B. Buskop Patent Attorney, Reg. No. 32,202

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					Applicant(s): Joop Roodenburg and Pieter Dirk Melis Van Duivendijk					
					Atty. Docket No.: 1141.11A					
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Document	Examiner	Patent	Date	· · · · · · · · · · · · · · · · · · ·	Name	Class	Sub	Filing Date		
Number	Initial*	Number					Class	If Appropriate		
A1		3,658,298	04/2	5,72	Moore	254	190	11/14/69		
A2		3,714,995	02/06/73		Hanes	175	5	09/04/70		
A3		3,791,628	02/12/74		Burns	254	172	07/26/72		
A4		3,804,183	04/16/74		Duncan	175	5	05/01/72		
A5		3,917,230	11/04/75		Barron	254	173	01/24/72		
A 6		3,918,379	11/1	1/75	McNary	114	264	06/13/74		
A7		3,949,693	04/1	3/76	Bauer	114	265	10/25/74		
A8		4,423,994	01/0	3/84	Schefers	414	22	11/26/81		
A9		4,620,692	11/0	4/86	Foreman	254	277	10/31/84		
A10		4,688,764	08/2	5/87	Nayler	254	277	03/04/85		
A11		4,867,418	09/19	9/89	Daniels	254	277	01/12/89		
A12		5,894,895	04/20	0/99	Welsh	175	5	11/25/96		
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B2		GB 2171974A	03/04/86	Great Britain	B66C	13/04	X		
В3		GB 2087342	04/06/81	Great Britain	B60P	1/02	X		
B4		NL 1009043	04/29/98	Nether- lands	B63B	35/44		X	
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